

**National Ignition Facility  
Final Supplemental Environmental  
Impact Statement to the  
Stockpile Stewardship and Management  
Programmatic Environmental Impact Statement**

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**Volume I: Main Text**

Prepared by  
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## COVER SHEET

**RESPONSIBLE AGENCY:** U.S. Department of Energy

**TITLE:** National Ignition Facility Final Supplemental Environmental Impact Statement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement

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**ABSTRACT:** The U.S. Department of Energy (DOE) is constructing the National Ignition Facility (NIF) at Lawrence Livermore National Laboratory (LLNL) at Livermore, California. In 1997, buried capacitors containing polychlorinated biphenyls (PCBs) were discovered during site excavation for the NIF. The capacitors and contaminated soil were cleaned up to levels protective of human health and the environment in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and its implementing regulations and in consultation with state and federal regulators. In October 1997, DOE entered into a Joint Stipulation and Order approved and entered as an order of the court on October 27, 1997, in partial settlement of the lawsuit Civ. No. 97-936 (SS) (D.D.C.), *Natural Resources Defense Council et al. v Richardson et al.* Paragraph 7 of the Joint Stipulation and Order provides that a Supplemental Environmental Impact Statement (SEIS) shall evaluate "... the reasonably foreseeable significant adverse environmental impacts of continuing to construct and of operating NIF at LLNL with respect to any potential or confirmed contamination in the area by hazardous, toxic, and/or radioactive materials." On September 25, 1998, DOE announced in the *Federal Register* the agency's intent to prepare an SEIS for the NIF portion (Volume III, Appendix I) of the *Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (SSM PEIS) (DOE/EIS-0236, September 1996). The Joint Stipulation and Order required further investigations of potential buried wastes and of soil and groundwater contamination in seven site areas. The results of these investigations are as follows. Interviews and searches of historical information indicated a low probability of the existence of additional buried sources of contamination. Magnetometer, electromagnetic induction, and ground-penetrating radar surveys identified no additional potential areas of concern. In December 1998, soil sampling during routine maintenance operations identified residual PCBs in soils in the East Traffic Circle Area from a previous landfill closure. The area is outside the NIF Construction Area. The cleanup of the buried capacitors, contaminated soils, and other, nonhazardous items found in 1997 and 1998 resulted in dust emissions. However, the risks of cancer and noncancer health effects due to PCBs on inhaled dust from the cleanups are estimated to have been orders of magnitude below levels of concern established by the U.S. Environmental Protection Agency (EPA). Information from LLNL's extensive groundwater monitoring program and new information in this SEIS regarding present and potential future groundwater concentrations of PCBs in the study areas indicate that PCB contamination levels are well below concentrations that would impact human health and the environment. Concentrations of PCBs reaching the groundwater are conservatively estimated to be less than 0.5% of EPA's current drinking water guidelines for PCBs. No impacts on human health or the environment would result from this low level of potential contamination.